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August 4, 1926.

PAPERS ON COLORIMETRY
from
THE NATIONAL BUREAU OF STANDARDS

I. Official Publications Issued by the Government Printing Office. (Listed in Chronological Order.)

These papers may be consulted at any Government Depository Library, of which there is at least one in each congressional district. A complete list of these libraries is contained in Bureau of Standards Circular No. 24, obtainable from the Publication Section, Bureau of Standards, Washington, D. C.

Provided they are not out of print, these papers may be purchased of the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices listed. If the price is enclosed in parentheses, the paper is out of print and not available.

The significance of the letters preceding publication numbers is as follows:-

S means "Scientific Paper of the Bureau of Standards".
T means "Technologic Paper of the Bureau of Standards".
C means "Circular of the Bureau of Standards".
M means "Miscellaneous Publication of the Bureau of Standards".

An asterisk (*) before the title indicates that the major responsibility for the paper lies with some section of the Bureau other than the Colorimetry Section, but that the latter section has afforded considerable advice or assistance in the work.

Two asterisks (**) before the title indicates that the paper emanates from some section of the Bureau other than the Colorimetry Section, but has a bearing on colorimetry or close relation to it. However, numerous papers which might be so classed (on spectroradiometry, photometry, etc.) are not listed here. For complete list, consult B. S. Circular No. 24, and supplements to it.

Three asterisks (***) before the title indicates that the paper antedates the formal organization of the Colorimetry Section at the Bureau.

Title and Author	Date of issue	Paper No.	Price
*** TALBOT'S LAW AS APPLIED TO THE ROTATING SECTORED DISK Edward P. Hyde	March 1, 1906	S 26	15¢
*** A POCKET SPECTROPHOTOMETER P. G. Nutting	July 15, 1906	S 39	(5¢)
*** A COMPLETE FORM OF FECHNER'S LAW P. G. Nutting	Dec. 15, 1906	S 49	(5¢)
*** PURITY AND INTENSITY OF MONOCHROMATIC LIGHT SOURCES P. G. Nutting	Sept. 1, 1907	S 44	(5¢)
*** THE LUMINOUS EQUIVALENT OF RADIATION P. G. Nutting	Sept. 3, 1908	S 103	(15¢)
*** A METHOD FOR CONSTRUCTING THE NATURAL SCALE OF PURE COLOR P. G. Nutting	Apr. 27, 1909	S 118	(5¢)
*** THE DAYLIGHT EFFICIENCY OF ARTIFICIAL ILLUMINANTS Herbert E. Ives	May, 1909	S 125	(5¢)
*** LUMINOSITY AND TEMPERATURE P. G. Nutting	July, 1909	S 133	(5¢)
*** WHITE LIGHT FROM THE MERCURY ARC AND ITS COMPLEMENTARY Herbert E. Ives	Aug. 1, 1909	S 128	(5¢)
*** THE VISIBILITY OF RADIATION. A RECALCULATION OF KÖNIG'S DATA P. G. Nutting	Oct. 1, 1910	S 154	(5¢)
*** A PHOTOMETRIC ATTACHMENT FOR SPECTROSCOPES P. G. Nutting	Oct. 1, 1910	S 155	(5¢)
*** THE DETERMINATION OF THE OPTICAL PROPERTIES OF MATERIALS	March 1 1911	C 28	(5¢)
*** A NEW PRECISION COLORIMETER P. G. Nutting	July 25, 1912	S 187	(5¢)

Title and Author	Date of Issue	Paper No.	Price
SPECIFICATION OF THE TRANSPARENCY OF PAPER AND TRACING CLOTH	May 17, 1917	C 63	5¢
** AN "AVERAGE EYE" FOR HETEROCHROMATIC PHOTOMETRY, AND COMPARISON OF A FLICKER AND AN EQUALITY-OF-BRIGHTNESS PHOTOMETER E. C. Crittenden and F. K. Richtmyer	May 26, 1917	S 299	5¢
** LUMINOUS RADIATION FROM A BLACK BODY AND THE MECHANICAL EQUIVALENT OF LIGHT W. W. Coblentz and W. B. Emerson	June 30, 1917	S 305	5¢
MEASUREMENT AND SPECIFICATION OF THE PHYSICAL FACTORS WHICH DETERMINE THE SATURATION OF CERTAIN TINTS OF YELLOW Irwin G. Priest and Chauncey G. Peters	June 30, 1917	T 92	5¢
** RELATIVE SENSIBILITY OF THE AVERAGE EYE TO LIGHT OF DIFFERENT COLORS AND SOME PRACTICAL APPLICATIONS TO RADIATION PROBLEMS W. W. Coblentz and W. B. Emerson	Sept. 12, 1917	S 303	15¢
** SPECTRORADIOMETRIC INVESTIGATION OF THE TRANSMISSION OF VARIOUS SUBSTANCES W. W. Coblentz, W. B. Emerson, and M. B. Long	Aug. 8, 1918	S 325	5¢
** GLASSES FOR PROTECTING THE EYES FROM INJURIOUS RADIATIONS W. W. Coblentz and W. B. Emerson.	Feb. 28, 1919 (3rd Edn.)	T 93	10¢
THE ULTRA-VIOLET AND VISIBLE TRANSMISSION OF EYE-PROTECTIVE GLASSES K. S. Gibson and H. J. McNicholas	June 7, 1919	T 119	10¢
PHOTO-ELECTRIC SPECTROPHOTOMETRY BY THE NULL METHOD K. S. Gibson	Oct. 11, 1919	S 349	5¢
CONTRAST SENSIBILITY OF THE EYE Enoch Karrer and E.P.T. Tyndall	March 8, 1920	S 366	5¢

Title and Author	Date of Issue	Paper No.	Price
THE ULTRA-VIOLET AND VISIBLE TRANSMISSION OF VARIOUS COLORED GLASSES K. S. Gibson, E.P.T.Tyndall, and H. J. McNicholas	Mch. 19, 1920	T 148	10¢
RELATIVE SPECTRAL TRANSMISSION OF THE ATMOSPHERE Enoch Karrer and E.P.T.Tyndall	July 21, 1920	S 389	10¢
** MEASUREMENT OF DIFFUSE REFLECTION FACTORS, AND A NEW ABSOLUTE REFLECTOMETER A. H. Taylor	July 28, 1920	S 391	5¢
COLOR AND SPECTRAL COMPOSITION OF CERTAIN HIGH-INTENSITY SEARCHLIGHT ARCS Irwin G. Priest, W. F. Meggers, K. S. Gibson, E.P.T.Tyndall, and H. J. McNicholas	Aug.12, 1920	T 168	5¢
AN EXAMINATION OF THE MUNSELL COLOR SYSTEM I. SPECTRAL AND TOTAL REFLECTION AND THE MUNSELL SCALE OF VALUE Irwin G. Priest, K. S. Gibson, and H. J. McNicholas	Sept.30, 1920	T 167	10¢
** A SIMPLE PORTABLE INSTRUMENT FOR THE ABSOLUTE MEASUREMENT OF REFLECTION AND TRANSMISSION FACTORS A. H. Taylor	Nov.30, 1920	S 405	5¢
** USE OF THE ULBRICHT SPHERE IN MEASURING REFLECTION AND TRANSMISSION FACTORS Enoch Karrer	Aug.10, 1921	S 415	5¢
THE SPECTRAL DISTRIBUTION OF ENERGY REQUIRED TO EVOKE THE GRAY SENSATION Irwin G. Priest	Aug.25, 1921	S 417	10¢
** SPECTRORADIOMETRIC INVESTIGATION OF THE TRANSMISSION OF VARIOUS SUBSTANCES, II W. W. Coblentz	Aug.29, 1921	S 418	5¢

Title and Author	Date of Issue	Paper No.	Price
THE SPECTRAL TRANSMISSIVE PROPERTIES OF DYES: I. SEVEN PERMITTED FOOD DYES, IN THE VISIBLE, ULTRA-VIOLET, AND NEAR INFRA-RED K.S. Gibson, H. J. McNicholas, E.P.T. Tyndall, and M. K. Frehafer, with the cooperation of W. E. Mathewson, Bureau of Chemistry	June 15, 1922	S 440	15¢
MEASUREMENT OF THE COLOR TEMPERATURE OF THE MORE EFFICIENT ARTIFICIAL LIGHT SOURCES BY THE METHOD OF ROTATORY DISPERSION Irwin G. Priest	July 24, 1922	S 443	5¢
VISIBILITY OF RADIANT ENERGY K. S. Gibson and E.P.T.Tyndall	Aug.11, 1923	S 475	15¢
* MEASURE OF THE COLOR CHARACTERISTICS OF WHITE PAPER R. E. Lofton	Nov.17, 1923	T 244	5¢
**PULP AND PAPER FIBER COMPOSITION STANDARDS: REFERENCE STANDARDS, SHOWING THE COLOR REACTIONS OF COMMON PAPER -MAKING FIBERS AND STANDARD FIBER MIXTURES WITH VARIOUS STAINS FOR USE IN IDENTIFICATION AND ESTIMATION OF FIBER COMPOSITION OF PAPER Muriel F. Merritt	Apr.25, 1924	T 250	15¢
TABLES AND GRAPHS FOR FACILITATING THE COMPUTATION OF SPECTRAL ENERGY DISTRIBUTION BY PLANCK'S FORMULA M. Katherine Frehafer and Chester L. Snow	Mch.21, 1925	M 56	35¢
** KILOCYCLE-METER CONVERSION TABLE. (While designed particularly for use in radio work, this table will be found equally useful in the visible range of radiation. E.g., if used intelligently with proper placing of the decimal point, it may serve to convert wave lengths in millimicrons to frequency in trillions per second (fresnels).)	Oct.9, 1925	M 67	5¢

Title and Author	Date of Issue	Paper	Price
* A PHOTOMETRIC METHOD FOR MEASURING THE HIDING POWER OF PAINTS H. D. Bruce	Jan. 16, 1926	T 306	10¢
THE LOVIBOND COLOR SYSTEM, I. A SPECTROPHOTOMETRIC ANALYSIS OF THE LOVIBOND GLASSES K. S. Gibson and F. K. Harris	(B. S. Sci. Paper in press. Will probably be issued about January, 1927.)		

II. Papers Emanating from the Colorimetry Section, Bureau of Standards, Published Elsewhere than in the Official Publications of the Bureau. (Listed in Chronologic Order.)

An asterisk (*) before the title indicates that the author was not a regular member of the Colorimetry Section, but that he used its laboratory facilities or obtained considerable advice or assistance from the section in carrying on the work reported in the paper.

An asterisk (*) after the title indicates an abstract of a paper presented before some scientific society, containing usually information not published elsewhere.

Two asterisks (**) after the title indicates a committee report in the preparation of which some member or members of the section cooperated.

Title and Author	Publication Reference
1. COLOR SPECIFICATIONS* Irwin G. Priest	Rep. Proc. Fourth Ann. Meet. Soc. Cotton Products Analysts, June 21, 1913, p. 6.
2. THE QUARTZ COLORIMETER AND ITS APPLICABILITY TO THE COLOR GRADING OF COTTON SEED OIL. Irwin G. Priest	Rep. Proc. Fifth Ann. Meet. Soc. Cotton Products Analysts, May 16, 1914, p. 22.
3. REPORT ON INVESTIGATIONS CONCERNING THE COLOR AND SPECTRAL TRANSMISSION OF COTTON SEED OIL* Irwin G. Priest and Chauncey G. Peters	Rep. Proc. Sixth Ann. Conv., Soc. Cotton Products Analysts, May 14-15, 1915, p.67.
4. THE BUREAU OF STANDARDS CONTRAST METHOD FOR MEASURING TRANSPARENCY. Irwin G. Priest	Trans. Am. Ceramic Soc., 17, 1915.
5. A PROPOSED METHOD FOR THE PHOTOMETRY OF LIGHTS OF DIFFERENT COLORS*. Irwin G. Priest	Phy.Rev. (2), 6, p.64; July, 1915; and 9, p. 341; April, 1917; and 10, p. 208; August, 1917.
6. THE WORK OF THE NATIONAL BUREAU OF STANDARDS ON THE ESTABLISHMENT OF COLOR STANDARDS AND METHODS OF COLOR SPECIFICATION. Irwin G. Priest	Trans. Ill. Eng. Soc., 13, p. 38; Feb. 1918.
7. A PRECISION METHOD FOR PRODUCING ARTIFICIAL DAYLIGHT*. Irwin G. Priest	Phy. Rev. (2), 11, p. 502; June, 1918.

Title and Author	Publication Reference
8. THE LAW OF SYMMETRY OF THE VISIBILITY FUNCTION* Irwin G. Priest	Phy. Rev. (2), 11, p. 498; June, 1918.
9. A ONE-TERM PURE EXPONENTIAL FORMULA FOR THE SPECTRAL DISTRIBUTION OF RADIANT ENERGY FROM A COMPLETE RADIATOR* Irwin G. Priest	Jour. Opt. Soc. Am., 2-3, p. 18; Jan.-March, 1919.
10. PHOTO-ELECTRIC SPECTROPHOTOMETRY BY THE NULL METHOD* K. S. Gibson	Jour. Opt. Soc. Am., 2-3, p. 23; Jan.-March, 1919.
11. A NEW FORMULA FOR THE SPECTRAL DISTRIBUTION OF ENERGY FROM A COMPLETE RADIATOR* Irwin G. Priest	Phy. Rev. (2), 13, p. 314; Apr., 1919; and 14, p.191; Aug., 1919.
12-16. REPORTS ON MILITARY INVESTIGATIONS, AMERICAN PHYSICAL SOCIETY, WASHINGTON, APRIL, 1919.	Phy. Rev. (2), 14, Aug.and Sept., 1919 (pages as indicated).
12. THE SPECTRAL COMPOSITION AND COLOR OF CERTAIN HIGH INTENSITY SEARCHLIGHT ARCS* Irwin G. Priest, W. F. Meggers, H. J. McNicholas, K. S. Gibson, and E.P.T.Tyndall, in cooperation with the Searchlight Investigation Section, Corps of Engineers, U. S. A.	p. 184
13. OPTICAL AND PHOTOGRAPHIC METHODS FOR THE DETECTION OF INVISIBLE WRITING* Irwin G. Priest and E.P.T. Tyndall	p. 188
14. REPORT ON THE APPLICABILITY OF ULTRA-VIOLET RAYS TO SIGNALING* Irwin G. Priest and K. S. Gibson	p. 188
15. THE SPECTRAL TRANSMISSION OF FILTERS USED TO DETECT CAMOUFLAGE OR IMPROVE VISIBILITY* K. S. Gibson, E.P.T.Tyndall and H. J. McNicholas.	p. 261
16. A METHOD FOR THE COLOR GRADING OF RED FLARES* Irwin G. Priest	p. 264

Title and Author	Publication Reference
17. THE COLOR OF SOYA BEAN OIL AS COMPARED WITH THAT OF COTTON SEED OIL. Irwin G. Priest	The Cotton Oil Press, Jan., 1920.
18. REPORT OF THE COLORIMETRY COMMITTEE OF THE OPTICAL SOCIETY OF AMERICA, 1919. Irwin G. Priest, Chairman.	(Not published; copy may be borrowed from Bureau of Standards' Library. Cf. Jour.Opt.Soc.Am.,4, p.186; May, 1920.)
19. REPORT ON INVESTIGATIONS OF THE COLOR AND SPECTRAL TRANSMISSIVITY OF VEGETABLE OILS*. Irwin G. Priest	The Cotton Oil Press, July, 1920.
20. INFRA-RED ABSORPTION SPECTRA OF VEGETABLE OILS. K. S. Gibson	The Cotton Oil Press, Sept., 1920;
21. PRELIMINARY NOTE ON THE RELATIONS BETWEEN THE QUALITY OF COLOR AND THE SPECTRAL DISTRIBUTION OF LIGHT IN THE STIMULUS. Irwin G. Priest	Jour. Opt. Soc. Am., 4, p. 389; Sept., 1920.
22. NOTE ON THE RELATION BETWEEN THE FREQUENCIES OF COMPLEMENTARY HUES. Irwin G. Priest.	Jour. Opt. Soc. Am., 4, p. 403; Sept., 1920; and 5,p. 513; Nov., 1921.
23. A NEW STUDY OF THE LEUCOSCOPE AND ITS APPLICATION TO PYROMETRY. Irwin G. Priest	Jour. Opt. Soc. Am., 4, p. 448; Nov., 1920.
24. REPORT ON CALIBRATION OF SIXTEEN LOVIBOND RED GLASSES. Irwin G. Priest	The Cotton Oil Press, Jan., 1921.
25. A METHOD OF OBTAINING RADIANT ENERGY HAVING THE VISIBLE SPECTRAL DISTRIBUTION OF A COMPLETE RADIATOR AT VERY HIGH TEMPERATURES. Irwin G. Priest	Jour. Opt. Soc. Am., 5, p. 178; March, 1921.
26. THE OPTICAL BASIS OF BITTINGER'S CAMOUFLAGE PAINTINGS*. Irwin G. Priest and M. K. Frehafer.	Jour. Wash. Acad. Sci., p. 238, May 19, 1921. (Cf. Jour.Op.Soc.Am.,4, pp. 390-395; Sept., 1920.)

Title and Author	Publication Reference
27. A DIRECT READING SPECTROPHOTOMETER FOR MEASURING THE TRANSMISSIVITY OF LIQUIDS*. Irwin G. Priest	Phy. Rev. (2), 18, p. 127; Aug., 1921.
28. MEASUREMENT OF THE COLOR TEMPERATURE OF THE MORE EFFICIENT ARTIFICIAL LIGHT SOURCES BY THE METHOD OF ROTATORY DISPERSION. Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci.Inst., 6, p. 27; Jan., 1922.
29. REPORT OF THE COLORIMETRY COMMITTEE OF THE OPTICAL SOCIETY OF AMERICA, 1920-21**.	Jour.Opt.Soc.Am.and Rev.Sci. Inst., 6, p. 527; Aug.,1922. (Copies may be obtained from Prof.F.K.Richtmyer,Cornell Univ.,Ithaca,N.Y., at 50 ¢ each.)
30. *PIGMENTS OF THE MENDELIAN COLOR TYPES IN MAIZE: ISOQUERCITRIN FROM BROWN-HUSKED MAIZE. Charles E. Sando and H.H.Bartlett	Jour. Biol. Chem., 54, p. 629; Nov., 1922.
31. THE EFFECT OF VARIOUS CONDITIONS UPON THE DETERMINATION OF THE NORMAL STIMULUS OF GRAY*. Irwin G. Priest and Casper L. Cottrell	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 7, p. 73; Jan., 1923.
32. PRELIMINARY DATA ON THE COLOR OF DAYLIGHT AT WASHINGTON*. Irwin G. Priest	Jour. Opt. Soc. Am and Rev. Sci. Inst., 7, p. 78; Jan., 1923.
33. APPARATUS FOR THE DETERMINATION OF HUE SENSIBILITY (WAVE LENGTH DIFFERENCES PERCEPTIBLE BY DIFFERENCE IN HUE) AND THE VISIBILITY OF RADIANT ENERGY*. Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 7, p. 99; Jan., 1923.
34. THE EFFECT OF SOME SUBSTITUTES FOR TIN OXIDE ON THE OPACITY OF WHITE ENAMELS FOR SHEET STEEL. R.R.Danielson and M.K.Frehafer	Jour. Am. Ceramic Soc., 6, p. 634; May, 1923.
35. SPECTROPHOTOMETRY K. S. Gibson	Dict. of Applied Physics, 4, p. 737; 1923.

Title and Author	Publication Reference
36. DIRECT-READING PHOTO-ELECTRIC MEASUREMENT OF SPECTRAL TRANSMISSION K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 7, p. 693; Sept. 1923.
37. THE COLORIMETRY AND PHOTOMETRY OF DAYLIGHT AND INCANDESCENT ILLUMINANTS BY THE METHOD OF ROTATORY DISPERSION Irwin G. Priest	Jour.Opt.Soc.Am.and Rev.Sci. Inst.,7,p.1175;Dec.,1923; (Trans.Ill.Eng.Soc.,18,p.861; Nov.,1923. Abstract.)
38. *THE QUANTITATIVE DETERMINATION OF CAROTIN BY MEANS OF THE SPECTROPHOTOMETER AND THE COLORIMETER F. M. Schertz	Jour. Agr. Res., 26, p.383; Dec., 1923.
39. APPARATUS FOR THE DETERMINATION OF COLOR IN TERMS OF DOMINANT WAVE LENGTH, PURITY, AND BRIGHTNESS Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 8, pp. 28 and 173; Jan., 1924.
40. A COMPARISON OF EXPERIMENTAL VALUES OF DOMINANT WAVE LENGTH AND PURITY WITH THEIR VALUES COMPUTED FROM THE SPECTRAL DISTRIBUTION OF THE STIMULUS* Irwin G. Priest, K.S.Gibson, and A.E.O.Munsell	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 8, p. 28; Jan., 1924.
41. SOME TESTS OF THE PRECISION AND RELIABILITY OF MEASUREMENTS OF SPECTRAL TRANSMISSION BY THE KOENIG-MARTENS SPECTROPHOTOMETER Irwin G.Priest, H.J.McNicholas, and M.Katherine Frehafer	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 8, pp. 30 and 201; Jan., 1924.
42. THE VISIBILITY OF RADIANT ENERGY K.S.Gibson and E.P.T.Tyndall	Trans.Ill.Eng.Soc.,19,p.176; Feb., 1924.
43. THE RELATIVE VISIBILITY FUNCTION K. S. Gibson	Proc. of the Int. Comm. on Ill., 6th Meeting;July,1924.
44. SPECTRAL CHARACTERISTICS OF TEST SOLUTIONS USED IN HETEROCHROMATIC PHOTOMETRY K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 9, p. 113; Aug., 1924.

Title and Author	Publication Reference
45. *SPECTROPHOTOMETRIC ANALYSIS APPLIED TO CHROMOTROPE 10B. W.D. Appel and W.R.Brode	Ind. and Eng. Chem., 16, p. 797; Aug., 1924.
46. *THE ELIMINATION OF VARIABLES IN THE DYEING METHOD OF TESTING DYES. William D. Appel	Am. Dyestuff Reporter, 13, p. 507; Aug., 1924.
47. *OPTICALLY ACTIVE DYES II. ADSORPTION, ABSORPTION SPECTRA AND ROTATION. Wallace R. Brode with Roger Adams	Jour. Am. Chem. Soc., 46, p. 2032; Sept., 1924.
48. VISIBILITY OF RADIANT ENERGY EQUATION. E.P.T.Tyndall and K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 9, p. 403; Oct., 1924.
49. THE COMPUTATION OF COLORIMETRIC PURITY. Irwin G.Priest, L.B.Tuckerman, Herbert E.Ives, and F.K.Harris	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 9, p. 503; Nov., 1924.
50. SPECTROPHOTOMETRY, REPORT OF THE OPTICAL SOCIETY OF AMERICA PROGRESS COMMITTEE FOR 1922-23**. K.S.Gibson, Chairman.	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 10, p. 169; Feb., 1925.
51. *THE QUANTITATIVE DETERMINATION OF XANTHOPHYLL BY MEANS OF THE SPECTROPHOTOMETER AND THE COLORIMETER. F. M. Schertz	Jour. Agr. Res., 30, p. 253; Feb., 1925.
52. THE SPECIFICATION OF COLOR IN TERMS OF DOMINANT WAVE LENGTH, PURITY, AND BRIGHTNESS*. Irwin G.Priest, K.S.Gibson, and A.E.O.Munsell	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 10, p. 291, March, 1925.
53. *SOME PHYSICAL AND CHEMICAL PROPERTIES OF CAROTIN AND THE PREPARATION OF THE PURE PIGMENT. F. M. Schertz	Jour. Agr. Res., 30, p.469; March, 1925.

Title and Author	Publication Reference
54. *SOME PHYSICAL AND CHEMICAL PROPERTIES OF XANTHOPHYLL AND THE PREPARATION OF THE PURE PIGMENT F. M. Schertz	Jour. Agr. Res., 30, p. 575; March, 1925.
55. MEASUREMENTS OF ILLUMINATION AND COLOR TEMPERATURE AT WASHINGTON DURING THE SOLAR ECLIPSE, JANUARY 24, 1925* Irwin G.Priest, K.S.Gibson, and F.K.Harris	Phy. Rev. (2), 25, p. 901; June, 1925.
56. DETERMINATION OF THE TIME OF A SOLAR ECLIPSE FROM MEASUREMENTS OF RELATIVE ILLUMINATION*. Irwin G.Priest, K.S.Gibson, and F.K.Harris.	Phy. Rev. (2), 25, p. 902; June, 1925.
57. SOME TESTS ON THE ACCURACY OF MEASUREMENT WITH THE ROTATORY DISPERSION COLORIMETRIC PHOTOMETER. K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 11, p. 75; July, 1925.
58. GRAY SKIES AND WHITE SNOW* Irwin G. Priest	Jour. Wash. Acad. Sci., 15, p. 306; July 19, 1925; Jour. Opt.Soc.Am.and Rev.Sci.Inst., 11, p. 133; Aug., 1925.
59. COLORS AND FORMS OF TRAFFIC SIGNALS (CODE PROPOSED BY SECTIONAL COMMITTEE OF THE AMERICAN ENGINEERING STANDARDS COMMITTEE)**.	Public Roads, U.S.Dept.Agr., 6, p. 134; Aug., 1925.
60. *TRAFFIC SIGNALS. Morton G. Lloyd	Proc.Int.Assoc.Munic.Elec., p. 154; 1925.
61. REPORT OF THE OPTICAL SOCIETY OF AMERICA PROGRESS COMMITTEE ON RADIOMETRY AND PHOTOMETRY FOR 1923-24**	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 11, p. 357; Oct., 1925.
62. SPECTRAL CENTROID RELATIONS FOR ARTIFICIAL DAYLIGHT FILTERS K. S. Gibson	Jour.Opt.Soc.Am.and Rev.Sci. Inst., 11, p. 473; Nov.,1925.

Title and Author	Publication Reference
63. *THE EFFECT OF SOLVENTS ON THE ABSORPTION SPECTRUM OF A SIMPLE AZO DYE Wallace R. Brode	Jour. Phys. Chem., 30, p.56; Jan., 1926.
64. STANDARD ARTIFICIAL SUNLIGHT FOR COLORIMETRIC PURPOSES* Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 12, p. 479; May, 1926.
65. A SPECTROPHOTOMETRIC ANALYSIS OF THE LOVIBOND COLOR SYSTEM* K.S.Gibson and F.K.Harris	Jour. Opt. Soc. Am., and Rev. Sci. Inst., 12, p. 481; May, 1926.
66. THE UNIT OF PHOTOGRAPHIC INTENSITY, REPORT OF THE OPTICAL SOCIETY OF AMERICA COMMITTEE**	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 12, p. 567; June, 1926.
67. REPORT OF THE OPTICAL SOCIETY OF AMERICA COMMITTEE ON COLOR TERMINOLOGY QUESTIONNAIRE**	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 43; July, 1926.
68. THE COMPUTATION OF COLORIMETRIC PURITY, II. Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, pp. 123-132; Aug., 1926.
69. THE COMPUTATION OF COLORIMETRIC PURITY Deane B. Judd	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, pp. 133-155; Aug., 1926.
70. THE PRODUCTION OF RADIANT ENERGY OF UNIFORM INTENSITY OVER THE VISIBLE SPECTRUM* K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 305; Sept., 1926.
71. AN EXPERIMENT BEARING ON THE ADOPTION OF A STANDARD NEUTRAL STIMULUS IN COLORIMETRY; THE CHOICE AS BETWEEN "SUN" AND "EQUAL ENERGY"* Irwin G. Priest	Jour, Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 306;Sept., 1926.
72. THE MINIMUM PERCEPTIBLE COLORIMETRIC PURITY AS A FUNCTION OF DOMINANT WAVE LENGTH WITH SUNLIGHT AS NEUTRAL STANDARD* Irwin G.Priest and F.G.Brickwedde	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, pp. 306-307; Sept., 1926.

Title and Author	Publication Reference
73. BLUE SKY AND WHITE SNOW* Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 308; Sept., 1926.
74. *THE COLOR TEMPERATURE OF GAS-FILLED LAMPS AS A FUNCTION OF TIME IN SERVICE* H. E. Howe	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 304; Sept., 1926.
75. SPECTRAL FILTERS K. S. Gibson	Jour.Opt.Soc.Am.and Rev.Sci. Inst., 13, p. 267;Sept.,1926.
76. *THE ABSORPTION SPECTRA OF BENZENEAZOBENZENE Wallace R. Brode	Jour. Am. Chem. Soc., 48, pp. 1984-1988; 1926.
77. *THE DISSOCIATION OF POTASSIUM IODIDE AND THE ABSORPTION SPECTRA OF IODINE AND POTASSIUM IODIDE Wallace R. Brode	Jour. Am. Chem. Soc., 48, pp. 1877-1882; 1926.

BUREAU OF STANDARDS
Colorimetry Section

Publications During the Fiscal Year 1927
(July 1, 1926 - June 30, 1927)

I. Official Publication by the Government Printing Office:

Title and Author	Date of Issue	Paper No.	Price
THE LOVIBOND COLOR SYSTEM. I. A SPECTROPHOTOMETRIC ANALYSIS OF THE LOVIBOND GLASSES K. S. Gibson, F. K. Harris, and Irwin G. Priest	Feb. 17, 1927	S 547	15¢

II. Papers Emanating from the Colorimetry Section, Bureau of Standards, Published Elsewhere than in the Official Publications of the Bureau.

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Title and author	Publication Reference
67. REPORT OF THE OPTICAL SOCIETY OF AMERICA COMMITTEE ON COLOR TERMINOLOGY QUESTIONNAIRE**	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 43; July, 1926.
68. THE COMPUTATION OF COLORIMETRIC PURITY, II Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 123; Aug., 1926.
69. THE COMPUTATION OF COLORIMETRIC PURITY Deane B. Judd	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 133; Aug., 1926.
70. THE PRODUCTION OF RADIANT ENERGY OF UNIFORM INTENSITY OVER THE VISIBLE SPECTRUM* K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 305; Sept., 1926.

Title and Author	Publication Reference
71. AN EXPERIMENT BEARING ON THE ADOPTION OF A STANDARD NEUTRAL STIMULUS IN COLORIMETRY; THE CHOICE AS BETWEEN "SUN" AND "EQUAL ENERGY"* Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 306; Sept., 1926.
72. THE MINIMUM PERCEPTIBLE COLORIMETRIC PURITY AS A FUNCTION OF DOMINANT WAVE LENGTH WITH SUNLIGHT AS NEUTRAL STANDARD* Irwin G. Priest and F. G. Brickwedde	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 306; Sept., 1926.
73. BLUE SKY AND WHITE SNOW* Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 308; Sept., 1926.
74. THE COLOR TEMPERATURE OF GAS-FILLED LAMPS AS A FUNCTION OF TIME IN SERVICE* H. E. Howe	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 304; Sept., 1926.
75. SPECTRAL FILTERS K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 13, p. 267; Sept., 1926.
76. * THE ABSORPTION SPECTRA OF BENZENEAZOBENZENE Wallace R. Brode	Jour. Am. Chem. Soc., 48, p. 1984; July, 1926.
77. * THE DISSOCIATION OF POTASSIUM IODIDE AND THE ABSORPTION SPECTRA OF IODINE AND POTASSIUM IODIDE Wallace R. Brode	Jour. Am. Chem. Soc., 48, p. 1877; July, 1926.
78. * OPTICALLY ACTIVE DYES. III. PHYSICAL PROPERTIES, DYEING REACTIONS AND MECHANISM OF DYEING Wallace R. Brode with Roger Adams	Jour. Am. Chem. Soc., 48, p. 2193; August, 1926.
79. * OPTICALLY ACTIVE DYES. IV. ASYMMETRIC DYES FROM META-AMINOMANDELIC ACID Wallace R. Brode with Roger Adams	Jour. Am. Chem. Soc., 48, p. 2202; August, 1926.

Title and Author	Publication Reference
80. * REPRODUCIBLE LIQUID FILTERS FOR THE PRODUCTION OF "WHITE LIGHT"* R. Davis and K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 135; Feb. 1927.
81. A PROPOSED METHOD FOR THE MEASUREMENT OF THE RELATIVE VISIBILITY FUNCTION* K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 135; Feb. 1927.
82. APPARATUS FOR THE DETERMINATION OF THE VISIBILITY OF ENERGY AND THE FUNDAMENTAL SCALES OF VISUAL PSYCHOPHYSICS* Irwin G. Priest and K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 136; Feb., 1927.
83. SENSIBILITY TO WAVELENGTH DIFFERENCE AS A FUNCTION OF PURITY* E. P. T. Tyndall	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 137; Feb., 1927.
84. SENSIBILITY TO WAVELENGTH DIFFERENCE AND THE PRECISION OF MEASUREMENT OF DOMINANT WAVELENGTH FOR YELLOW COLORS OF HIGH SATURATION* Irwin G. Priest and D. B. Judd	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 137; Feb. 1927.
85. AN EXPERIMENT ON COLOR DISCRIMINATION UNDER COMMONPLACE CONDITIONS* Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 138; Feb., 1927.
86. ON THE USE OF THE INTEGRATING SPHERE IN REFLECTOMETRY* H. J. McNicholas	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 142; Feb., 1927.
87. *REPRODUCIBLE LIQUID FILTERS FOR THE DETERMINATION OF THE COLOR TEMPERATURES OF INCANDESCENT LAMPS* R. Davis and K. S. Gibson	Phys. Rev. (2), 29, p. 916; June, 1927.
88. PURITY AND SATURATION; A SATURATION SCALE FOR YELLOW* Deane B. Judd	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 470; June, 1927.
89. THE EMPIRIC RELATION BETWEEN DOMINANT WAVE LENGTH AND PURITY* Deane B. Judd	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 14, p. 475; June, 1927.

B U R E A U O F S T A N D A R D S
Colorimetry Section

Publications During the Fiscal Year 1928
(July 1, 1927 - June 30, 1928)

I. Official Publications by the Government Printing Office.

Two asterisks (**) before the title indicates that the paper emanates from some section of the Bureau other than the Colorimetry Section, but has a bearing on colorimetry or close relation to it. However, numerous papers which might be so classed (on spectroradiometry, photometry, etc.) are not listed here. For complete list, consult B. S. Circular No. 24, and supplements to it.

Title and Author	Date of Issue	Paper No.	Price
** COLOR IN THE SUGAR INDUSTRY H. H. Peters and F. P. Phelps	March 12, 1927	T 338	20 ¢
** TRANSMISSIVE PROPERTIES OF EYE-PROTECTIVE GLASSES AND OTHER SUBSTANCES W. W. Coblentz and R. Stair	June 19, 1928	T 369	10 ¢

II. Papers Emanating from the Colorimetry Section, Bureau of Standards, Published Elsewhere than in the Official Publications of the Bureau.

An asterisk (*) before the title indicates that the work is only in part the product of the Colorimetry Laboratory. It usually means that some use was made of apparatus and facilities afforded by the section, or that the author obtained considerable advice and assistance from members of the section.

An asterisk (*) after the title indicates an abstract of a paper presented before some scientific society.

Title and author	Publication Reference
90. CORRECTION OF A PREVALENT ERROR IN REGARD TO THE DATA ON PHOTOMETRIC SENSIBILITY AS A FUNCTION OF WAVE LENGTH AT LOW BRIGHTNESS Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 15, p. 82; Aug., 1927.
91. NOTE ON THE RELATIVE COMFORT IN READING BY ARTIFICIAL DAYLIGHT AND UNMODIFIED GAS-FILLED TUNGSTEN LAMPS Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 15, p. 131, Sept., 1927.

Title and author	Publication Reference
92. *A METHOD FOR MEASURING THE COLOR OF TEXTILES William D. Appel	Am. Dyestuff Reporter, Jan. 23, 1928, p. 49.
93. A STUDY OF 129 LOVIBOND RED GLASSES WITH RESPECT TO THE RELIABILITY OF THEIR NOMINAL GRADES Deane B. Judd, and Geraldine K. Walker	Oil and Fat Industries, 5, p. 16; Jan., 1928.
94. SATURATION OF COLORS DETERMINED FROM THE VISUAL RESPONSE FUNCTIONS* Deane B. Judd	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 16, p. 115; February, 1928.
95. SENSIBILITY TO COLOR CHANGE DETERMINED FROM THE VISUAL RESPONSE FUNCTIONS: EXTENSION TO COMPLETE AND PARTIAL DICHROMASY* Deane B. Judd	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 16, p. 115; Feb., 1928.
96. STANDARDIZING THE RED AND YELLOW LOVIBOND GLASSES* Irwin G. Priest and K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 16, p. 116; Feb., 1928.
97. PRELIMINARY DATA ON THE LEAST PERCEPTIBLE DIFFERENCE IN DOMINANT WAVE LENGTH BY THE METHOD OF RIGHT AND WRONG ANSWERS* Irwin G. Priest	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 16, p. 117; Feb., 1928.
98. *COLOR TEMPERATURE CLASSIFICATION OF NATURAL AND ARTIFICIAL ILLUMINANTS Norman Macbeth	Trans. Ill. Eng. Soc., 23, p. 302; Mar., 1928.
99. TESTS OF COLOR SENSE OF A.O.C.S. MEMBERS AND DATA ON SENSIBILITY TO CHANGE IN LOVIBOND RED Irwin G. Priest	Oil and Fat Industries, 5, p. 63; Mar., 1928.
100. *FILTERS FOR THE REPRODUCTION OF SUNLIGHT AND THE DETERMINATION OF COLOR TEMPERATURE* Raymond Davis and K. S. Gibson	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 16, p. 332; May, 1928.
101. EQUIPMENT FOR ROUTINE SPECTRAL TRANSMISSION AND REFLECTION MEASUREMENTS* H. J. McNicholas	Jour. Opt. Soc. Am. and Rev. Sci. Inst., 16, p. 333; May, 1928.

Title and Author	Publication Reference
102. *ARTIFICIAL SUNLIGHT FOR PHOTOGRAPHIC SENSITOMETRY Raymond Davis and K. S. Gibson	Trans. Soc. Motion Picture Engineers, 12, p. 225; 1928.
103. STANDARDIZATION OF LOVIBOND GLASSES (MONTHLY REPORTS FROM COLORIMETRY SECTION TO PRESIDENT OF AMERICAN OIL CHEMISTS' SOCIETY)	Oil and Fat Industries, 4, p. 433; Dec., 1927; 5, p. 27; January; p. 58; February; p. 92; March; p. 114; April; p. 152; May; p. 184; June (there are many typographical errors in this report); p. 220; July; p. 247; August; p. 278; September, 1928.

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Colorimetry Section

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I. Official Publications by the Government Printing Office.

These papers may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices noted.

Title and Author	Date of Issue	Paper No.	Price
ABSOLUTE METHODS IN REFLECTOMETRY H. J. McNicholas	July, 1928	RP3	10 ¢
** TINTING STRENGTH OF PIGMENTS H. D. Bruce	August, 1928	RP7	10 ¢
EQUIPMENT FOR ROUTINE SPECTRAL TRANSMISSION AND REFLECTION MEASUREMENTS H. J. McNicholas	November, 1928	RP30	20 ¢
EFFECT OF TEMPERATURE CHANGE ON THE COLOR OF RED AND YELLOW LOVIBOND GLASSES Deane B. Judd	November, 1928	RP31	5 ¢
USE OF THE UNDER-WATER SPARK WITH THE HILGER SECTOR PHOTOMETER IN ULTRA-VIOLET SPECTROPHOTOMETRY H. J. McNicholas	December, 1928	RP33	5 ¢
LEAST RETINAL ILLUMINATION BY SPECTRAL LIGHT REQUIRED TO EVOKE THE "BLUE ARCS OF THE RETINA" Deane B. Judd	February, 1929	RP43	5 ¢

** THE SPECTRAL ABSORPTION OF CERTAIN MONOAZO DYES Wallace R. Brode	March, 1929	RP47	15 ¢
CALIBRATION OF SIXTY-FIVE 35-YELLOW LOVIBOND GLASSES Irwin G. Priest, Deane B. Judd, K. S. Gibson, and Geraldine K. Walker	April, 1929	RP58	10 ¢

II. Papers Published Elsewhere than in the Official Publications of the Bureau.

An asterisk (*) after the title indicates an abstract of a paper presented before some scientific society.

Two asterisks (**) after the title indicate a committee report in the preparation of which some members of the section cooperated.

Title and author	Publication Reference
104. AMERICAN STANDARD COLORS FOR TRAFFIC SIGNALS** (omitted from previous list) American Standards Association	A. S. A., 29 West Thirty-ninth street, New York, N. Y., Nov. 15, 1927; 25 ¢
105. THE UNIT OF PHOTOGRAPHIC INTENSITY** Report of the O.S.A. Committee on the Unit of Photographic Intensity, L. A. Jones, Chairman	Proc. 7th International Congress of Photography, London, July, 1928, pp. 152-161.
106. *ARTIFICIAL SUNLIGHT FOR PHOTOGRAPHIC SENSITOMETRY Raymond Davis and K. S. Gibson	Proc. 7th International Congress of Photography, London, July, 1928, pp. 161-173.
107. SPECTRAL FILTERS K. S. Gibson	Int. Crit. Tab., 5, pp. 271-274; 1929.
108.**AN INTERLABORATORY COMPARISON OF COLORED PHOTOMETRIC FILTERS E. C. Crittenden and A. H. Taylor	Trans. Illum. Eng. Soc., 24, pp. 153-207; Feb., 1929.
109. RESOLUTIONS DEALING WITH THE PHOTOGRAPHIC UNIT OF INTENSITY PRESENTED AT THE INTERNATIONAL CONGRESS OF PHOTOGRAPHY* ** Report of the O.S.A. Committee on Standards of Photographic Intensity, L.A. Jones, Chairman	J. Opt. Soc. Am. and Rev. Sci. Inst., 18, pp. 162-163; March, 1929.